OIPE

RAW SEQUENCE LISTING   DATE: 12/20/2001
PATENT APPLICATION: US/10/007,047   TIME: 14:14:26

Input Set : A:\UM-06692.ST25.txt
Output Set: N:\CRF3\12202001\J007047.raw

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    3 <110> APPLICANT: Mizukami, Ikuko
    4         Ross, Theodora
    5         Rao, Dinesh
    7 <120> TITLE OF INVENTION: HIP1 Cancer Markers
    9 <130> FILE REFERENCE: UM-06692
C--> 11 <140> CURRENT APPLICATION NUMBER: US/10/007,047
C--> 11 <141> CURRENT FILING DATE: 2001-12-06
   11 <160> NUMBER OF SEQ ID NOS: 6
   13 <170> SOFTWARE: PatentIn version 3.0
   15 <210> SEQ ID NO: 1
   16 <211> LENGTH: 4534
   17 <212> TYPE: DNA
   18 <213> ORGANISM: Homo sapiens
   20 <220> FEATURE:
   21 <221> NAME/KEY: misc_feature
   22 <222> LOCATION: (4521)..(4521)
   23 <223> OTHER INFORMATION: The nucleotide "n" can be either a,t,c, or g
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   29 <223> OTHER INFORMATION: The nucleotide "n" can be either a,t,c, or g
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   37 cgcggggtcg gcgctgggct ggaggcggcg gagcgcgaga gcttcgagcg gactcagact   180
   39 gtcagcatca ataaggccat taatacgcag gaagtggctg taaaggaaaa acacgccaga   240
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   43 cgcctgcctc tgtctagcaa cgcagtgctc tgctggaagt tctgccatgt gttccacaaa   360
   45 ctcctccgag atggacaccc gaacgtcctg aaggactctc tgagatacag aaatgaattg   420
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   53 tcccagttaa cagtggagat gtttgactac ctggagtgtg aactcaacct cttccaaaca   660
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   57 ctcgccccgc tgatccaggt catcttggac tgcagccacc tttatgacta cactgtcaag   780
   59 cttctcttca aactccactc ctgcctccca gctgacaccc tgcaaggcca ccgggaccgc   840
   61 ttcatggagc agtttacaaa gttgaaagat ctgttctacc gctccagcaa cctgcagtac   900
   63 ttcaagcggc tcattcagat cccccagctg cctgagaacc cacccaactt cctgcgagcc   960
   65 tcagccctgt cagaacatat cagccctgtg gtggtgatcc ctgcagaggc ctcatccccc  1020
   67 gacagcgagc cagtcctaga gaaggatgac ctcatggaca tggatgcctc tcagcagaat  1080
   69 ttatttgaca acaagtttga tgacatcttt ggcagttcat tcagcagtga tcccttcaat  1140
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 89 cttgccacaa gccaacggga gcttcaggtt ctgcaaggca gcctggaaac ttctgcccag 1740
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181 tctttatcta tagcaactca ttggtggtag ccatcaagca cttcggaatt cctgcagccc   4500
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192 <221> NAME/KEY: misc_feature
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194 <223> OTHER INFORMATION: The amino acid "X" can be any amino acid
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205 Arg Glu Ser Phe Glu Arg Thr Gln Thr Val Ser Ile Asn Lys Ala Ile
206         35                  40                  45
208 Asn Thr Gln Glu Val Ala Val Lys Glu Lys His Ala Arg Thr Cys Ile
209     50                  55                  60
211 Leu Gly Thr His His Glu Lys Gly Ala Gln Thr Phe Trp Ser Val Val
212 65                  70                  75                  80
214 Asn Arg Leu Pro Leu Ser Ser Asn Ala Val Leu Cys Trp Lys Phe Cys
215             85                  90                  95
217 His Val Phe His Lys Leu Leu Arg Asp Gly His Pro Asn Val Leu Lys
218             100                 105                 110
220 Asp Ser Leu Arg Tyr Arg Asn Glu Leu Ser Asp Met Ser Arg Met Trp
221         115                 120                 125
223 Gly Tyr Leu Ser Glu Gly Tyr Gly Gln Leu Cys Ser Ile Tyr Leu Lys
224         130                 135                 140
226 Leu Leu Arg Thr Lys Met Glu Tyr His Thr Lys Asn Pro Arg Phe Pro
227 145                 150                 155                 160
229 Gly Asn Leu Gln Met Ser Asp Arg Gln Leu Asp Glu Ala Gly Glu Ser
230             165                 170                 175
232 Asp Val Asn Asn Phe Ser Gln Leu Thr Val Glu Met Phe Asp Tyr Leu
233             180                 185                 190
235 Glu Cys Glu Leu Asn Leu Phe Gln Thr Val Phe Asn Ser Leu Asp Met
236         195                 200                 205
238 Ser Arg Ser Val Ser Val Thr Ala Ala Gly Gln Cys Arg Leu Ala Pro
239     210                 215                 220
241 Leu Ile Gln Val Ile Leu Asp Cys Ser His Leu Tyr Asp Tyr Thr Val
242 225                 230                 235                 240
244 Lys Leu Leu Phe Lys Leu His Ser Cys Leu Pro Ala Asp Thr Leu Gln
245             245                 250                 255
247 Gly His Arg Asp Arg Phe Met Glu Gln Phe Thr Lys Leu Lys Asp Leu
248         260                 265                 270
250 Phe Tyr Arg Ser Ser Asn Leu Gln Tyr Phe Lys Arg Leu Ile Gln Ile
251         275                 280                 285
253 Pro Gln Leu Pro Glu Asn Pro Asn Phe Leu Arg Ala Ser Ala Leu
254         290                 295                 300
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257 305                 310                 315                 320
259 Pro Asp Ser Glu Pro Val Leu Glu Lys Asp Asp Leu Met Asp Met Asp
260                 325                 330                 335
262 Ala Ser Gln Gln Asn Leu Phe Asp Asn Lys Phe Asp Asp Ile Phe Gly
263                 340                 345                 350
265 Ser Ser Phe Ser Ser Asp Pro Phe Asn Phe Asn Ser Gln Asn Gly Val
266                 355                 360                 365
268 Asn Lys Asp Glu Lys Asp His Leu Ile Glu Arg Leu Tyr Arg Glu Ile
269         370                 375                 380
271 Ser Gly Leu Lys Ala Gln Leu Glu Asn Met Lys Thr Glu Ser Gln Arg
272 385                 390                 395                 400
274 Val Val Leu Gln Leu Lys Gly His Val Ser Glu Leu Glu Ala Asp Leu
275                 405                 410                 415
277 Ala Glu Gln Gln His Leu Arg Gln Gln Ala Ala Asp Asp Cys Glu Phe
278                 420                 425                 430
280 Leu Arg Ala Glu Leu Asp Glu Leu Arg Arg Gln Arg Glu Asp Thr Glu
281         435                 440                 445
283 Lys Ala Gln Arg Ser Leu Ser Glu Ile Glu Arg Lys Ala Gln Ala Asn
284         450                 455                 460
286 Glu Gln Arg Tyr Ser Lys Leu Lys Glu Lys Tyr Ser Glu Leu Val Gln
287 465                 470                 475                 480
289 Asn His Ala Asp Leu Leu Arg Lys Asn Ala Glu Val Thr Lys Gln Val
290                 485                 490                 495
292 Ser Met Ala Arg Gln Ala Gln Val Asp Leu Glu Arg Glu Lys Lys Glu
293         500                 505                 510
295 Leu Glu Asp Ser Leu Glu Arg Ile Ser Asp Gln Gly Gln Arg Lys Thr
296         515                 520                 525
298 Gln Glu Gln Leu Glu Val Leu Glu Ser Leu Lys Gln Glu Leu Ala Thr
299         530                 535                 540
301 Ser Gln Arg Glu Leu Gln Val Leu Gln Gly Ser Leu Glu Thr Ser Ala
302 545                 550                 555                 560
304 Gln Ser Glu Ala Asn Trp Ala Ala Glu Phe Ala Glu Leu Glu Lys Glu
305                 565                 570                 575
307 Arg Asp Ser Leu Val Ser Gly Ala Ala His Arg Glu Glu Glu Leu Ser
308         580                 585                 590
310 Ala Leu Arg Lys Glu Leu Gln Asp Thr Gln Leu Lys Leu Ala Ser Thr
311         595                 600                 605
313 Glu Glu Ser Met Cys Gln Leu Ala Lys Asp Gln Arg Lys Met Leu Leu
314         610                 615                 620
316 Val Gly Ser Arg Lys Ala Ala Glu Gln Val Ile Gln Asp Ala Leu Asn
317 625                 630                 635                 640
319 Gln Leu Glu Glu Pro Pro Leu Ile Ser Cys Ala Gly Ser Ala Asp His
320                 645                 650                 655
322 Leu Leu Ser Thr Val Thr Ser Ile Ser Ser Cys Ile Glu Gln Leu Glu
323         660                 665                 670
325 Lys Ser Trp Ser Gln Tyr Leu Ala Cys Pro Glu Asp Ile Ser Gly Leu
326         675                 680                 685
328 Leu His Ser Ile Thr Leu Leu Ala His Leu Thr Ser Asp Ala Ile Ala
```

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329      690                    695                    700
331 His Gly Ala Thr Thr Cys Leu Arg Ala Pro Pro Glu Pro Ala Asp Ser
332 705                    710                    715                    720
334 Leu Thr Glu Ala Cys Lys Gln Tyr Gly Arg Glu Thr Leu Ala Tyr Leu
335                    725                    730                    735
337 Ala Ser Leu Glu Glu Glu Gly Ser Leu Glu Asn Ala Asp Ser Thr Ala
338                    740                    745                    750
340 Met Arg Asn Cys Leu Ser Lys Ile Lys Ala Ile Gly Glu Glu Leu Leu
341                    755                    760                    765
343 Pro Arg Gly Leu Asp Ile Lys Gln Glu Glu Leu Gly Asp Leu Val Asp
344      770                    775                    780
346 Lys Glu Met Ala Ala Thr Ser Ala Ala Ile Glu Thr Ala Thr Ala Arg
347 785                    790                    795                    800
349 Ile Glu Glu Met Leu Ser Lys Ser Arg Ala Gly Asp Thr Gly Val Lys
350                    805                    810                    815
352 Leu Glu Val Asn Glu Arg Ile Leu Gly Cys Cys Thr Ser Leu Met Gln
353                    820                    825                    830
355 Ala Ile Gln Val Leu Ile Val Ala Ser Lys Asp Leu Gln Arg Glu Ile
356                    835                    840                    845
358 Val Glu Ser Gly Arg Gly Thr Ala Ser Pro Lys Glu Phe Tyr Ala Lys
359      850                    855                    860
361 Asn Ser Arg Trp Thr Glu Gly Leu Ile Ser Ala Ser Lys Ala Val Gly
362 865                    870                    875                    880
364 Trp Gly Ala Thr Val Met Val Asp Ala Ala Asp Leu Val Val Gln Gly
365                    885                    890                    895
367 Arg Gly Lys Phe Glu Glu Leu Met Val Cys Ser His Glu Ile Ala Ala
368                    900                    905                    910
370 Ser Thr Ala Gln Leu Val Ala Ala Ser Lys Val Lys Ala Asp Lys Asp
371                    915                    920                    925
373 Ser Pro Asn Leu Ala Gln Leu Gln Gln Ala Ser Arg Gly Val Asn Gln
374      930                    935                    940
376 Ala Thr Ala Gly Val Val Ala Ser Thr Ile Ser Gly Lys Ser Gln Ile
377 945                    950                    955                    960
379 Glu Glu Thr Asp Asn Met Asp Phe Ser Ser Met Thr Leu Thr Gln Ile
380                    965                    970                    975
382 Lys Arg Gln Glu Met Asp Ser Gln Val Arg Val Leu Glu Leu Glu Asn
383                    980                    985                    990
385 Glu Leu Gln Lys Glu Arg Gln Lys  Leu Gly Glu Leu Arg Lys Lys His
386      995                    1000                    1005
388 Tyr Glu  Leu Ala Gly Val Ala  Glu Gly Trp Glu Glu  Gly Thr Glu
389      1010                    1015                    1020
391 Ala Ser  Pro Pro Thr Leu Gln  Glu Val Val Thr Glu  Lys Glu Ser
392      1025                    1030                    1035
394 Gln Thr  Asn Thr Pro Tyr Val  Ser Val Asn Pro Cys  Tyr Leu Ser
395      1040                    1045                    1050
397 Arg Val  Cys Tyr Phe Pro Ser  His Arg Pro Asn Pro  Trp Ser Pro
398      1055                    1060                    1065
400 Arg Gly  Ser His Thr Thr Ala  Ile Thr Gln Cys Arg  Gly His Ala
401      1070                    1075                    1080
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L:11 M:270 C: Current Application Number differs, Replaced Current Application No
L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:183 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:478 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
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